Chapter 2
Alternatives

Introduction

This chapter describes and compares alternatives considered for the Indian Creek Road Reconstruction Proposal. It also includes a description of management standards and monitoring.

Alternative Development Process

The Forest Service Interdisciplinary Team considered comments received from the public scoping and governmental agencies to develop alternatives.

Alternatives Considered in Detail

Alternative A

Alternative A is the no-action alternative. This alternative is required and serves as a baseline to measure effects if no management changes are implemented. The no-action alternative represents the status quo for the project area. The no-action alternative would not restore motorized road access on the Indian Creek road to the public, the private landowners in the drainage, and Forest Service administrative use. Indian Creek road would remain washed out at approximately milepost 3.0. Road access to private and public lands above the washout would be provided from the East Fork of Indian Creek road.

Alternative B

This alternative was developed as the Proposed Action to restore motorized road access on the Indian Creek road to the public, the private landowners in the drainage, and to Forest Service administrative use.

This alternative proposes to repair the Indian Creek road washout by constructing a new road prism east of the washed out section of the Indian Creek road (Figure 2.1).

- The newly constructed road prism, approximately 1160 feet in length and 14 feet in width, will be within 6 feet to 300 feet adjacent to Indian Creek.
- There will be an estimated 6CCF (hundred cubic feet) of timber ranging from pole size to small saw-log size removed on the estimated 0.8 acre of road clearing limits. Trees removed from within the road clearing limits will be used as the physical barriers trapping the road sediment runoff and used in future district fisheries instream restoration projects.
- Physical log barriers will be anchored between the toe of the newly constructed road prism and Indian Creek to help trap and minimize road sediment from entering Indian Creek.
- A filter slash windrow will be constructed at the bottom of the road fill slope. Felled trees from the right-of-way clearing will be placed against standing trees below the new road to create an anchor point for the slash windrow. Felled trees will be limbed on one or

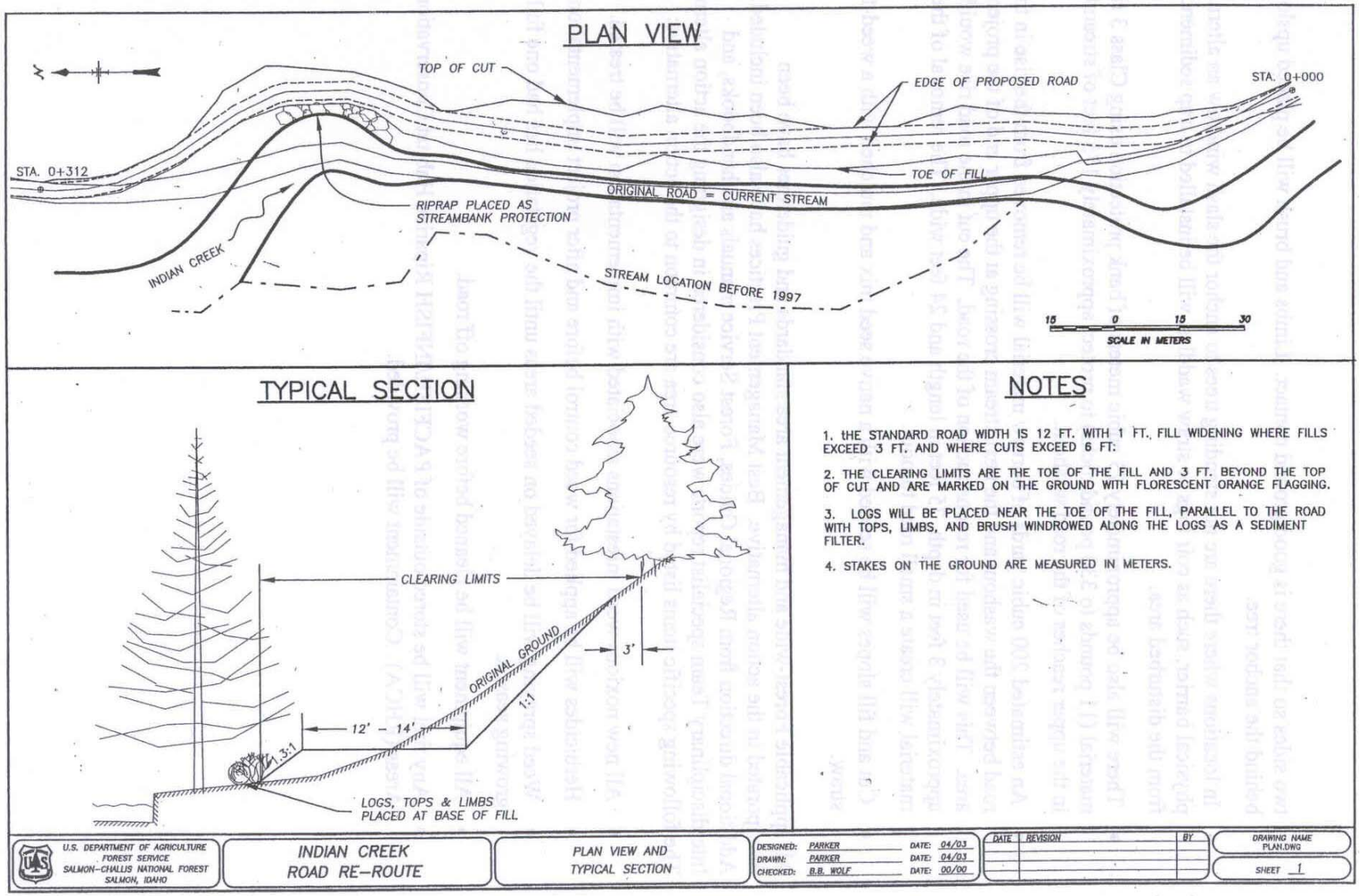
two sides so that there is good ground contact. Limbs and brush will be placed upslope behind the anchor tree.

- In locations where there are not standing trees to anchor the slash windrow an alternate physical barrier, such as coir logs or straw waddles, will be installed to trap sediments from the disturbed area.
- There will also be approximately 75 cubic meters of bank protection using Class 3 riprap material (11 pounds to 330 pound rocks) to protect approximately 175 feet of streambank in the upper reaches of the road washout.
- An estimated 200 cubic yards of borrow material will be removed from the rise in the road between the washout and the next stream crossing at the upper end of the project area. This will be used for reconstruction of the road. The cut in the road rise would be approximately 3 feet in depth, 75 feet in length and 24 feet wide. The removal of the fill material will create a small road turnout.
- Cut and fill slopes will be seeded with a native seed mix and mulched with a weed-free straw.

All applicable Forest-wide and management area standards and guidelines have been incorporated in the action alternative. Best Management Practices have also been included. Additional direction from Regional Guides, Forest Service manuals and handbooks, and Interdisciplinary Team specialist reports were also considered in designing the action alternative. The following specific items listed by resource area are common to the action alternative:

- All new noxious weed infestations associated with implementation will be treated.
- Herbicides will be applied for weed control before and after project implementation.
- Weed spraying will be delayed on seeded areas until the vegetation has had one full growing season.
- All equipment will be cleaned before working off road.
- Any fuel will be stored outside of PACFISH/INFISH Riparian Habitat Conservation Areas (RHCA). Containment will be provided.

Figure 2.1 Engineering Road Design



Monitoring

Monitoring will be conducted to verify that the project is implemented as designed and is effective and efficient in meeting project and Forest Plan objectives. Monitoring is also conducted to ensure that implementation is consistent with established standards and guidelines as well as the design features and mitigations.

All alternatives will comply with specific monitoring requirements identified in the Forest Plan. The Forest Plan identified four applicable monitoring items, which this project will monitor:

- ✓ Anadromous and resident fish habitat quantity and quality (page V-6)
- ✓ Compare soil erosion for various forest practices (page V-9)
- ✓ Ground disturbing activities with potential to alter soil productivity (page V-9)
- ✓ Changes in water quality due to land management activities (page V-10)

In addition, before project implementation the project area will be monitored for all potential aquatic and terrestrial reproductive activities of Endangered Species Act listed species, R4 Regional Forester's sensitive species, and Forest Plan Management Indicator Species.

Alternatives Considered but Eliminated from Detailed Study

Several alternatives were considered during the planning process, but not analyzed in detail. These are described briefly below, along with the reasons for not considering them further.

Brushy Gulch New Road Construction

This was an alternative raised by the public to construct a new road off the Brushy Gulch road (Forest Service road #041) connecting to the Indian Creek road above the washout. This alternative was eliminated from further consideration as it did not meet the purpose and need of meeting the Idaho Supreme Court Ruling. It would entail the construction of approximately 2.5 miles of road on steep terrain at an estimated expense of $150,000 to $180,000. It would increase road density and would potentially increase road sediment runoff into streams. Depending upon the funding source it could take over 5 years to fund implementation.

Reconstruct road and stream to their original locations before the washout

This alternative was eliminated from further consideration as it entailed an unacceptable amount of resource damage along with a high risk of another road washout in the future. Over the last few years numerous onsite field reviews by Forest Service fish biologists and hydrologists and other Federal and State Agency biologists have concluded that the stream channel and streambanks through the washout area have stabilized to the point where there would be more resource damage caused by relocating the existing stream channel back to the pre 1997 washout location than there would be relocating the road on the hill slope above the existing stream channel.

Relocate first 3 miles of Indian Creek Road

This alternative would look at relocating approximately the first 3 miles of the Indian Creek road up out of the valley bottom and away from Indian Creek. This relocation would construct a road entirely on National Forest System Lands on the east side of Indian Creek This alternative was

eliminated from further consideration as it did not meet the purpose and need of meeting the Idaho Supreme Court Ruling. It would construct approximately 3 miles of a parallel road system on steep terrain at an estimated expense of $180,000 to $216,000. It would increase road density and would potentially increase road sediment runoff into streams. Depending upon the funding source it could take over 5 years to fund implementation.

Relocate 1 mile of Indian Creek Road above the Indian Creek Guest Ranch Private Property
This alternative would look at relocating approximately 1 mile of the Indian Creek road up out of the valley bottom and away from Indian Creek east of the Indian Creek Guest Ranch. This alternative was eliminated from further consideration as it is outside of the jurisdiction of the Forest Service. It would construct approximately 1 mile of a parallel road system on steep terrain at an estimated expense of $60,000 to $72,000. It would increase road density and would potentially increase road sediment runoff into streams.

Replace the existing wooden bridge immediately down stream of the washout in conjunction with road reconstruction
This alternative would look at replacing the existing wooden bridge immediately down stream of the washout with a new stream crossing. This is Indian Creek stream crossing number five out of six on the Indian Creek road. This crossing is one of five Indian Creek stream crossings that do not meet the Idaho Legal Load Rating for large trucks (Appendix B). Stream crossing number three has approximately half the legal load rating as crossing number five. This alternative was eliminated from further consideration, as crossing number five is not the limiting factor for large truck access on the Indian Creek road. At this time it is unreasonable to replace bridge number five when bridge number three has approximately half of the legal load capacity of bridge number five. Bridge number five will be receiving the appropriate maintenance work to prevent the stream from scouring around the bridge abutment and allow for appropriate motorized use. Also, this alternative to replace bridge number five with a new bridge to Forest Service standards would require raising the road prism and bridge height five to six vertical feet. This new road prism would function as a dike across the natural floodplain. This would cause unreasonable environmental harm. There is a need in the future to assess all stream crossings on the entire Indian Creek road.

Comparison of Alternatives

Comparison by Issue

Although Chapter 3 presents a detailed discussion of the environmental effects of the alternatives, Chapter 2 concludes with a summary of the effects of the alternatives. Each alternative is evaluated for its effects on the issue indicators and is summarized in Table 2.1.

Table 2.1 Environmental Effects of Alternatives

Issue and Indicators	Alternative A	Alternative B
Water Quality Sediment Yield	Low	Low
Effects on Water Quality and Beneficial Uses	Water Quality and Beneficial Uses Supported	Water Quality and Beneficial Uses Supported
Watershed Risk Rating	Low	Low
Public Access and Safety Road access condition, distance and seasonality	No Changes	There would not be a mountain pass to climb therefore extending the vehicle access season on a safer road. The driving distance to private and public land in upper Indian Creek drainage would be shorter.
Noxious Weeds Acres infected	A slight increase in infested acres within the project area	No Increase in infested acres within the project area.
Fish Predicted effects on management indicator species, sensitive species, federally listed species and/or their habitats	No Changes	• NO Effect to sockeye salmon, chinook salmon, steelhead, and bull trout • NO Impact – R4 Sensitive Species westslope cutthroat trout • NO Effect and NO Impacts to Salmon-Challis National Forest MIS Species
Wildlife/Plants Predicted effects on management indicator species, sensitive species, federally listed species and/or their habitats	No Changes	• NO Effect to Lynx, Gray wolf, Bald Eagle • NO Impact to R4 Wildlife and Plant Sensitive Species • NO Effect and NO Impacts to Salmon-Challis National Forest MIS Species